

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Expanding Flexible Use of the 3.7 to 4.2 GHz Band)	GN Docket No. 18-122
)	
Petition for Rulemaking to Amend and Modernize)	RM-11791
Parts 25 and 101 of the Commission’s Rules to)	
Authorize and Facilitate the Deployment of Licensed)	
Point-to-Multipoint Fixed Wireless Broadband)	
Service in the 3.7-4.2 GHz Band)	
)	
Fixed Wireless Communications Coalition, Inc.,)	RM-11778
Request for Modified Coordination Procedures in)	
Bands Shared Between the Fixed Service and the)	
Fixed Satellite Service)	

REPLY COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association (“SIA”)¹ hereby replies to the comments submitted by the Wireless Internet Service Providers Association, Dynamic Spectrum Alliance, Google LLC, and Open Technology Institute at New America (collectively, the “P2MP Comments”)² in response to the May 3, 2019 public notice (“Notice”)³ seeking certain additional input in the above-captioned proceeding. In the Notice, the Commission requests input focusing on the

¹ SIA Executive Members include AT&T Services, Inc.; The Boeing Company; EchoStar Corporation; Intelsat S.A.; Iridium Communications Inc.; Kratos Defense & Security Solutions; Ligado Networks; Lockheed Martin Corporation; Maxar Technologies; Northrop Grumman Corporation; OneWeb; SES Americom, Inc.; Space Exploration Technologies Corp.; Spire Global; and ViaSat Inc. SIA Associate Members include ABS US Corp.; Airbus Defense and Space, Inc.; Analytical Graphics, Inc.; Artel, LLC; Blue Origin; DataPath, Inc.; Eutelsat America Corp.; ExoAnalytic Solutions; Globalstar, Inc.; Globecom; Glowlink Communications Technology, Inc.; HawkEye 360; Hughes; Inmarsat, Inc.; Kymeta Corporation; L3 Technologies; Panasonic Avionics Corporation; Peraton; Planet; Telesat Canada; TrustComm, Inc.; Ultisat, Inc.; and XTAR, LLC. For more information on SIA, see www.sia.org.

² See Comments of Wireless Internet Service Providers Association, GN Docket No. 18-122 (filed Jul. 3, 2019) (“WISPA PN Comments”); Comments of Dynamic Spectrum Alliance, GN Docket No. 18-122 (filed Jul. 3, 2019) (“DSA PN Comments”); Comments of Google LLC, GN Docket No. 18-122 (filed Jul. 3, 2019) (“Google PN Comments”); Comments of Open Technology Institute at New America, GN Docket No. 18-122 (filed Jul. 3, 2019) (“OTI PN Comments”).

³ See *International Bureau and Wireless Telecommunications Bureau Seek Focused Additional Comment in 3.7-4.2 GHz Band Proceeding*, Public Notice, GN Docket Nos. 18-122 *et al.* (rel. May 3, 2019).

relative interference protection rights of satellite operators and earth station operators, whether the Commission has authority to modify FSS operators' authorizations and earth station operators' registrations,⁴ and whether the Commission has authority to conduct a C-band incentive auction.⁵ The P2MP Comments, in contrast, discuss in large part potential P2MP operations in the C-band and the merits of the Commission's full-band, full-arc policy. These topics, while relevant to subjects identified in the earlier Notice of Proposed Rulemaking,⁶ are not material to the issues set forth in the Notice.⁷ Accordingly, the P2MP Comments should be disregarded or otherwise rejected as non-responsive.

SIA also notes that the P2MP proponents, as well as numerous other parties to the proceeding, agree that operators of receive-only earth stations are not FCC licensees.⁸ The comments of Charter Communications, Inc. and a few others, arguing to the contrary, are without merit.⁹ Those arguments rely on a strained statutory interpretation that the Commission rejected long ago as unreasonable because "it would require that all television and radio receivers be licensed as well as receive-only earth stations."¹⁰

SIA and others have already addressed the proposal raised in the P2MP Comments, and it should be rejected. At bottom, P2MP operations will not protect the tens of thousands of

⁴ See 47 U.S.C. § 316.

⁵ See Notice at 1-7.

⁶ See *Expanding Flexible Use of the 3.7-4.2 GHz Band et al.*, Order and Notice of Proposed Rulemaking, GN Docket Nos. 18-122 *et al.*, (rel. Jul. 13, 2018).

⁷ See WISPA PN Comments at 15-17; DSA PN Comments at 9-11, 18-21; Google PN Comments at 8-14; OTI PN Comments at 23-27.

⁸ See Google PN Comments at 6-7, OTI PN Comments at 20; DSA PN Comments at 12; WISPA PN Comments at 3-5; *see also, e.g.*, Comments of Verizon, GN Docket Nos. 18-122 *et al.*, at 2 (filed Jul. 3, 2019) ("Receive-only earth station registrants are not licensees, have no licensed spectrum usage rights to relinquish in the C-Band, and thus cannot participate in a reverse auction.").

⁹ *See, e.g.*, Comments of Charter Communications, Inc., GN Docket Nos. 18-122 *et al.*, at 4 (filed Jul. 3, 2019); Comments of ACA Connects – America's Communications Association, GN Docket Nos. 18-122 *et al.*, at 5–6 (filed Jul. 3, 2019).

¹⁰ *Regulation of Domestic Receive-Only Satellite Earth Stations*, First Report & Order, 74 F.C.C.2d 205 ¶ 31 (1979); *see also, e.g.*, Comments of C-Band Alliance, GN Docket Nos. 18-122 *et al.*, at 12-13 (filed Jul. 3, 2019).

ubiquitously deployed C-band receive earth stations. P2MP “transmissions necessarily emit high-powered signals in many directions, which greatly increases the difficulty of frequency coordination and the potential for harmful interference to existing C-band usage.”¹¹ Significant separation distances around earth stations are necessary to protect FSS operations, greatly limiting potential P2MP operations given the ubiquitous deployment of receive earth stations.¹² Moreover, the reliance on unknown databases as an interference mitigation mechanism, as urged by the P2MP proponents,¹³ is unproven and cannot be relied on to effectively prevent interference to widely deployed receive earth station antennas.¹⁴

Wireless internet service providers (“WISPs”) already have access to more than 10 gigahertz of licensed and unlicensed spectrum, which includes a substantial amount of mid-band spectrum.¹⁵ In addition, WISPs will have access to even more spectrum in the future, including the 3.55-3.7 GHz band (Citizens Broadband Radio Service) and potentially the 2.5 GHz, 4.9 GHz, and 6 GHz bands.¹⁶ P2MP proponents have not demonstrated that this spectrum is insufficient to support P2MP operations, and accordingly, there is no justification for expanding P2MP operations into the C-band.

P2MP operations also would further encumber the C-band with non-flexible-use services, making it inconsistent with the rapid deployment of 5G in the C-band and Chairman Pai’s 5G

¹¹ Comments of the Content Companies, GN Docket Nos. 18-122 *et al.*, at 11 (filed Oct. 29, 2018); *see also* Comments of GCI Communication Corp. (“GCI”), GN Docket No. 18-122, at 22-23 (filed May 31, 2018) (“GCI Initial PN Comments”); Comments of Satellite Industry Association, GN Docket Nos. 18-122 *et al.*, at 29 (filed Jul. 3, 2019).

¹² *See* Comments of C-Band Alliance, GN Docket Nos. 18-122 *et al.*, Technical Annex at 14 (filed Oct. 29, 2018) (“CBA NPRM Comments”).

¹³ *See* WISPA PN Comments at 16; DSA PN Comments at 19; OTI PN Comments at 14, 23, 26.

¹⁴ *See, e.g.*, Reply Comments of Satellite Industry Association, GN Docket Nos. 18-122 *et al.*, at 29 (filed Dec. 11, 2018) (“SIA NPRM Reply”); GCI Initial PN Comments at 12; Comments of Ericsson, GN Docket No. 17-183, at 6-7 (filed Oct. 2, 2017) (determining that such a database approach would not be advisable since they are still in development and have not yet been tested).

¹⁵ *See* SIA NPRM Reply at 26; CBA NPRM Comments at 44-47; Joint Reply Comments of Intel Corporation, Intelsat License LLC, and SES Americom, Inc., GN Docket Nos. 18-122 *et al.*, at 6 (filed Dec. 7, 2018).

¹⁶ *See* SIA NPRM Reply at 26.

FAST Plan.¹⁷ As a final matter, contrary to the position of the P2MP proponents, the full-band, full-arc rule must be maintained (i) to allow for migration of thousands of C-band users from the lower portion of C-band to the upper portion of C-band, where there is already substantial usage,¹⁸ and (ii) to maintain competitive and uninterrupted satellite services, resolve interference concerns, enable traffic adjustments in response to demand changes, and make coverage of live events possible.¹⁹

For the reasons discussed above, the Commission should disregard the largely non-responsive and duplicative P2MP Comments. The Commission should also remain cognizant of the tremendous value of satellite services as it continues to consider how best to accommodate terrestrial wireless services in the 3.7-4.2 GHz band.

Respectfully submitted,

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July 18, 2019

¹⁷ See *The FCC's 5G FAST Plan*, FCC, <https://www.fcc.gov/5G> (last viewed Jul. 11, 2019) (promoting pro-competitive, light-touch regulation when implementing 5G services).

¹⁸ See SIA NPRM Reply at 31; GCI Initial PN Comments at 13.

¹⁹ See SIA NPRM Reply at 30-36; CBA NPRM Comments at 42-44; Reply Comments of C-Band Alliance, GN Docket Nos. 18-122 *et al.*, at 49-50 (filed Dec. 7, 2018).